Application No.: 10/607,007

Response dated September 5, 2006

Reply to Office Action dated May 3, 2006

AMENDMENTS TO THE CLAIMS

Docket No.: 8734.217.00-US

This listing of claims will replace all prior versions, and listings, of claims in the

application:

Listing of Claims:

Claim 1. (Withdrawn): A fabrication system for a liquid crystal display device, comprising:

an alignment layer line for forming an alignment layer on a first substrate and a second

substrate, the first substrate and the second substrate being separately supplied thereto;

a spacer scattering line for scattering spacers on one of the first substrate and the second

substrate; a sealant coating line for coating a sealant material on one of the first substrate and the

second substrate;

an assembling line for bonding the first and second substrates together;

a cutting line for separating the bonded first and second substrates into a plurality of liquid

crystal display cells; and

a liquid crystal layer line for injecting liquid crystal material into each of the liquid crystal

display cells, wherein the alignment layer line, the spacer scattering line, the sealant coating line,

the assembling line, the cutting line, and the liquid crystal line are positioned along a single

fabrication line.

Claim 2. (Withdrawn): The fabrication system according to claim 1, wherein the first substrate

includes a plurality of thin film transistors and the second substrate includes a color filter.

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Claim 3. (Withdrawn): The fabrication system according to claim 1, wherein the alignment layer

line comprises:

an alignment layer coating line for coating the alignment layer on the first and second

substrates;

a plasticizing line for plasticizing the alignment layers of the first and second substrates; and

an aligning controlling force providing line for providing an aligning controlling force to the

plasticized alignment layers of the first and second substrates.

Claim 4. (Withdrawn): The fabrication system according to claim 3, wherein the aligning

controlling force providing line is a rubbing line for rubbing the alignment layers.

Claim 5. (Withdrawn): The fabrication system according to claim 1, wherein the liquid crystal

layer line comprises:

a liquid crystal injecting line for injecting the liquid crystal material into the liquid crystal

display cells through a liquid crystal injection hole; and

an encapsulating line for encapsulating the liquid crystal injection hole.

Claim 6. (Withdrawn): The fabrication system according to claim 1, further comprising at least one

buffer line disposed between each of the alignment layer line, the spacer scattering line, the sealant

coating line, the assembling line, the cutting line, and the liquid crystal layer line to synchronize

movement of the first and second substrates.

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Claim 7. (Withdrawn): The fabrication system according to claim 1, further comprising an

inspecting line for inspecting the liquid crystal display cells.

Claim 8. (Withdrawn): A fabrication system for a liquid crystal display device, comprising:

a first fabrication line separately supplied with a first substrate and a second substrate to

form an alignment layer on the first substrate and the second substrate, scatter spacers on the first

substrate, coat a sealant material on the second substrate, bond the first and second substrates

together, and cut the bonded first and second substrates into a plurality of liquid crystal display

cells; and

a second fabrication line for injecting liquid crystal material into each of the liquid crystal

display cells to form a liquid crystal material layer and for inspecting the liquid crystal display

cells.

Claim 9. (Currently Amended): A fabrication system for a liquid crystal display device,

comprising:

an alignment layer line for forming an alignment layer on a first substrate and a second

substrate, the first substrate and second substrate being separately supplied to the alignment layer

line;

a liquid crystal layer line for dispensing liquid crystal material on one of the first substrate

and the second substrate;

a sealant coating line for coating a sealant material on one of the first substrate and the

second substrate;

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an assembling line for bonding the first and second substrates together;

a cutting line for separating the bonded first and second substrates into a plurality of liquid

crystal display cells; and

at least one buffer line disposed between each of the alignment layer line, the liquid crystal

layer line, the sealant coating line, the assembling line, and the cutting line to maintain one of the

first and second substrates while the other of the first and second substrates is processed

synchronize movement of the first and second substrates,

wherein the alignment layer line, the liquid crystal layer line, the sealant coating line, the

assembling line, and the cutting line are physically connected along a single fabrication line.

Claim 10. (Original): The fabrication system according to claim 9, wherein the first substrate

includes a plurality of thin film transistors and the second substrate includes a color filter.

Claim 11. (Original): The fabrication system according to claim 9, further comprising pattered

spacers formed on the first substrate.

Claim 12. (Original): The fabrication system according to claim 9, wherein the alignment layer line

comprises:

an alignment layer coating line for coating an alignment layer material on the first and

second substrates;

a plasticizing line for plasticizing the alignment layer material; and

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an aligning controlling force providing line for providing an aligning controlling force to the

plasticized alignment layer material.

Claim 13. (Canceled).

Claim 14. (Original): The fabrication system according to claim 9, further comprising an

inspecting line for inspecting the liquid crystal display cells.

Claim 15. (Withdrawn): A method of fabricating a liquid crystal display device, comprising:

providing a first substrate and a second substrates separately to a unified fabrication line;

forming an alignment layer on the first substrate and the second substrate;

scattering spacers on one of the first substrate and the second substrate;

coating a sealant material on one of the first substrate and the second substrate;

bonding the first and second substrates together; separating the bonded first and second

substrates into a plurality of liquid crystal display cells; and

forming a liquid crystal material layer within each of the liquid crystal display cells.

Claim 16. (Withdrawn): The method according to claim 15, further comprising: forming a

plurality of thin film transistors on the first substrate; and forming a color filter layer on the second

substrate.

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Claim 17. (Withdrawn): The method according to claim 15, wherein the forming an alignment

layer comprises:

coating an alignment layer material separately on the first and second substrates;

plasticizing the coated alignment layer material; and

providing an aligning controlling force to the plasticized alignment layer material.

Claim 18. (Withdrawn): The method according to claim 15, wherein the forming a liquid crystal

material layer comprises:

injecting liquid crystal material into the liquid crystal display cell through a liquid crystal

injection hole; and encapsulating the liquid crystal injection hole.

Claim 19. (Withdrawn): The method according to claim 15, further comprising synchronizing

movement of the first and second substrates by maintaining one of the first and second substrates in

a buffer.

Claim 20. (Withdrawn): The method according to claim 15, further comprising inspecting the

liquid crystal display cells.

Claim 21. (Withdrawn): A method of fabricating a liquid crystal display device, comprising:

supplying a first substrate and a second substrate to an in-line fabrication system to form an

alignment layer on the first substrate, form spacers on the first substrate, coat a sealant material on

the second substrate, bond the first and second substrates together, and separate the bonded first and

second substrates into a plurality of liquid crystal display cells;

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injecting liquid crystal material into each of the liquid crystal display cells to form a liquid

crystal material layer; and

inspecting the liquid crystal display cells.

Claim 22. (Currently Amended): A method of fabricating a liquid crystal display device,

comprising:

supplying a first substrate and a second substrate separately into a single fabrication system;

forming an alignment layer on the first and second substrates separately in a first unit;

dispensing liquid crystal material onto one of the first substrate and the second substrate in a second

unit;

coating a sealant material on one of the first substrate and the second substrate in a third

unit;

synchronizing movement of the first and second substrates by maintaining one of the first

and second substrates in a buffer while the other of the first and second substrates is processed;

bonding the first and second substrates together in a fourth unit; and

separating the bonded first and second substrates into a plurality of liquid crystal display

cells in a fifth unit, the first, second, third, fourth and fifth units being physically connected along a

single fabrication line of the fabrication system.

Claim 23. (Original): The method according to claim 22, further comprising:

forming a plurality of thin film transistors on the first substrate; and forming a color filter

layer on the second substrate.

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Claim 24. (Original): The method according to claim 22, further comprising:

forming patterned spacers on the first substrate before supply the first substrate to the unified fabrication system.

Claim 25. (Original): The method according to claim 22, wherein the forming an alignment layer includes:

coating an alignment layer material on the first and second substrates separately;

plasticizing the coated alignment layer material; and

providing an aligning controlling force to the plasticized alignment layer material.

Claim 26. (Canceled).

Claim 27. (Original): The method according to claim 22, further comprising inspecting the liquid crystal display cells.